REMARKS

First, regarding paragraph 1 of the Office Action, the Examiner appears to have erred in that the statement in this paragraph that "original application was filed 14 April 2000 with a foreign priority date of 16 April 1999" includes two errs as follows:

1. The filing date for this application is 19 (not 14) April, 2000; and,
2. No priority claim has been made in this application.

Claim Amendments

Claims 1-18 were filed originally, with independent claims 1, 4, 10 and 13. By this amendment claims 5 and 14 are cancelled, claims 4 and 13 are made dependent upon claims 1 and 10, respectively, and claims 1, 2, 4, 6-11, 13, and 15-18 have been amended. Claims 1-4, 6-13 and 15-18 are pending, of which claims 1 and 10 are independent claims.

Examiner's Claim Rejections

Applicant respectfully requests reconsideration and withdrawal of the Examiner's rejection of the claims under 35 U.S.C. §102 and 35 U.S.C. §103, in view of the submissions set out below.

I. 35 U.S.C. §102 Rejection

By the subject Office Action the Examiner rejects claims 4-5 and 13-14 under 35 U.S.C. §102(b) as being allegedly anticipated by **Alasia** (U.S. Patent No. 5,708,717). However, none of the Examiner's comments regarding the claims and referencing passages in **Alasia** is correct so it appears that the Examiner has either misunderstood the invention defined by the claims or the scrambled indicia (SI) images provided by **Alasia's** apparatus and method, or both. With respect, this claim rejection of the Examiner has no factual or legal basis and should be withdrawn in full.

Moreover, the §102(b) rejected is no longer applicable in view of the present

claim amendments whereby claims 4 and 13 are no longer independent claims and, instead, are dependent on independent claims 1 and 10, respectively, neither of which has been rejected on this ground.

As dictated by MPEP 706.02, in order for a patent claim to be anticipated by a cited prior art reference it must teach every aspect of the claimed invention either explicitly or impliedly and any feature not directly taught must be inherently present. **Alasia** does not disclose the subject matter defined by the claims. Further, as more fully discussed below, **Alasia** does not in any respect suggest or render obvious any of the claims of this application whether considered alone or in combination with any prior art.

Alasia provides only a single-level, lens-decodable, security feature, comprising a visible "source" image (e.g. a person's photograph) into which a latent image (e.g. a depiction of that person's name and number, as shown in the brochure "Graphic Security Systems Corporation, *Scrambled Indicia Technology*" cited of record) is embedded by means of a digital scrambling operation whereby the source image is rasterized at the frequency of a decoding lens and the latent image is scrambled on the basis of, inter alia, the decoder lens' frequency and digitally embedded, by line segments, into the rasterized source image so as to produce a "Scrambled Indicia" (SI) image of which only the source image is visible (i.e. the latent image is not visible).

As stated in the "Background of the Invention" of Applicant's specification, at page 1, starting at line 19:

> *... U.S. Patent No. 5,708,717 to Alfred Alasia according to which a visible source image and latent image are optically scrambled by means of a computer to produce a combined image of which only the source image is visible to the unaided eye but the latent image may be identified by applying an optical lens to the combined*

image. In all of these examples the latent (hidden) image is detected by means of an optical decoder comprising lenticular lenses in a physical or computerized form (i.e. through the use of either a lenticular finding screen or, possibly, a digitally represented lens pattern overlay onto a computer display). However, such latent optically encoded images provide to a document only a single level of secured identifying indicia, with the security level being determined by the optical encoding parameters.

By contrast, Applicant's claimed encoding and decoding system, and methods, provide a (unitary) printable security device having two different, independent layers of security: a) one being a lower level, manually decodable security feature, namely, a deflected image from which a first source image may be revealed by manually decoding the deflected image using a physical lens; and, b) the other being a separate higher level, computer-only decodable security feature, namely, an encrypted image from which, by decoding using a decryption function, either a second source image or another computer-decodable image is revealed, each of these two levels of security features being independently usable according to a user's choice and without interfering with an ability to separately decode the other (i.e. at the election of the user).

With reference to the amended claims, **Alasia** does not disclose any of the following features of claim 1 and claim 10:

- deflection encoding applying a selected software lens to a first source image and producing a deflected image **and** encryption encoding means applying an encryption function to either the deflected image or to a second source image and producing an encrypted image.

- overlaying the deflected and encrypted images to produce said security device image whereby **neither of said first**

and second source images is visible upon viewing said security device image and wherein each of said deflected and encrypted images is preserved and identifiable by means of a predetermined feature such that either of said deflected and encrypted images may be decoded without interfering with an ability to separately decode the other of said deflected and encrypted images.

- the deflected image being **configured for detecting therefrom the first source image by decoding by means of: (i) a physical lenticular lens** corresponding to the software lens being manually applied to a printing of the security image; **and/or, (ii) computer decoding processing** applying the software lens to the deflected image, **each decoding means being selectable according to a user's choice without interference from any prior use of either or both decoding means to detect the first source image.**

- the encrypted image being configured for detecting therefrom either the deflected image or the second source image **solely by means of computer decoding processing** applying a decryption function corresponding to the encryption function to the encrypted image.

Nor does **Alasia** disclose all of the features of any of the remaining claims which are either directly or indirectly dependent on claim 1 or claim 10.

Accordingly, for the foregoing reasons, it is evident that the cited reference to

Alasia does not anticipate any of the present claims of this application.

II. 35 U.S.C. §103 Rejection

The Examiner has indicated that claims 10, 1, 11, 12, 2 and 3 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over **Alasia** in view of **Koltai et al.** (U.S. Patent No. 6,104,812). Further, the Examiner has indicated that claims 6-9 and 15-18 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over **Alasia** in view of **Brosh et al.** (U.S. Patent No. 5,303,370).

As dictated in MPEP 2143, in order to establish a *prima facie* case of obviousness, the Examiner must meet three requirements: First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; second, there must be a reasonable expectation of success; and thirdly, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

With respect to the first requirement, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. Additionally, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. Although a prior art device may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.

For the reasons stated above with respect to the rejection under 35 U.S.C. §102, Applicant submits that the cited reference to **Alasia** does not disclose or teach many of the features of the independent claims 1 and 10. This is true also of the features of dependent claims 4 and 13, which are neither disclosed nor suggested by **Alasia**. The Examiner's statements to the contrary are incorrect and, accordingly, Applicant requests that the Examiner reconsider both the actual disclosure of **Alasia** and the present claims.

The subject matter of the cited reference to **Koltai et al.** is not materially different from that of **Alasia**, for purposes of considering its relevance to Applicant's claims, because **Koltai et al.** simply improves upon the scrambling feature of **Alasia** (it will be noted by the Examiner that **Koltai et al.** makes use of the **Alasia** drawings and description). Unlike the SI image of **Alasia**, which is encoded by modifying line segments such that it can be read by a lens (in physical or software form) matched to the scrambling/rasterizing frequency, the hidden image of **Koltai et al.** is encoded by modifying pixels and can be readable only by a software lens. In both cases, however, only one level of decoding is provided, namely, a lens-based decoding. In contrast with Applicant's claimed invention, no higher level, decryption-based decoding is also independently provided within the security device of either of **Alasia** and **Koltai et al.**

Equally, the cited reference to **Brosh et al.** does not itself disclose or suggest the foregoing features of Applicant's claims and does not do so in any combination with **Alasia** or any other prior art. **Brosh et al.** discloses an unrelated, and very different, photographic imaging process whereby successive projected images are applied through a lenticular array at successive exposure intervals.

In light of the above remarks, applicant submits that the Examiner has not, and cannot, establish a *prima facie* case of obviousness with respect to independent claim 1 or 10. Reconsideration of the obvlousness rejection is therefore respectfully requested.

Applicant notes that if independent claims 1 and 10 are non-obvious under 35 USC 103 then any claim depending therefrom is non-obvious [see *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988)]. Applicant submits that each of the pending dependent claims is, therefore, allowable.

CONCLUSIONS

For all the foregoing reasons, applicant respectfully submits that each of the claims, as amended herein, is in good order and ready for allowance. Reconsideration and withdrawal of the claim rejections by the Examiner is respectfully requested. In the event that the Examiner cannot allow the present application for any reason, the Examiner is encouraged to contact Applicant's attorney by telephone to discuss resolution of any remaining issues.

Respectfully Submitted,
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